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Seizing the Sky: Federal Regulators Use Drones to Justify Controlling the Airspace Over Your Backyard

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As the availability of small, recreational, mass-market drones has expanded, so too have attempts by officials at the Federal Aviation Administration (FAA) to stake an exclusive regulatory claim in the drone space. In December 2015, at the same time the FAA was rushing its unprecedented drone-owners' registry into effect,[1] the agency issued a "Fact Sheet" restating its broad position that it could preempt virtually any local ordinance or state law governing the use of drones.[2] It arrived at this conclusion by equating manned aircraft flying almost exclusively at high altitudes and across state borders with small, unmanned drones flying almost exclusively at low altitudes and across distances of a few hundred feet. This fundamental mischaracterization enables a massive regulatory overreach that threatens the principle of federalism and demands clarification of property rights in the low-altitude airspace.

The Fall of a Maxim: *Cuius est solum, eius est usque ad coelum et ad infernos*[3]

Prior to the advent of modern aviation, the common law *ad coelum* doctrine provided that landowners owned the airspace above their land, without limit—everything from hell to heaven was theirs.[4] A tree branch or man-made structure leaning into the airspace above private property was as much of a trespass as a fence-jumping interloper would be. The owner could legitimately demand that the invading individual, branch, or structure be removed.

The *ad coelum* doctrine threatened to throw a wrench in aviation, because each time an airplane flew over private land, it was committing a trespass, exposing the pilot—and later the airline—to significant legal liability if they did not first secure a string of easements beneath their flightpaths. The burden to get those easements increased with aircraft flight ranges. One transcontinental flight might require innumerable agreements with individual landowners, and there could be significant hold-out problems. Concerned that this would inhibit the development of civil and commercial aviation, Congress passed the 1926 Air Commerce Act[5] to establish national sovereignty over the airspace of the United States. The "navigable airspace"—the space above the minimum safe altitude of flight, later set by regulators at 500 feet[6]—became a federally regulated commons open to aviation.

Low-Altitude Airspace Is a Nebulous Place

Although the status of airspace above 500 feet has been clearly defined and established for nearly a century, the same cannot be said of the space below that threshold. In 1946, the Supreme Court found in *United States v. Causby*[7] that the *ad coelum* doctrine "has no place in the modern world;"[8] yet "continuous invasions" of airspace close to the ground "affect the use of the surface of the land itself."[9] The *Causby* Court therefore resolved that "if the landowner is to

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have full enjoyment of the land, he must have exclusive control of the *immediate reaches* of the enveloping atmosphere,"[10] and that "incident to his ownership, [the landowner] has a claim to [superadjacent airspace] and that invasions of it are in the same category as invasions of the surface."[11]

But how high do "immediate reaches" of the air go? The Court gave no precise answer, but stated: "The landowner owns at least as much of the space above the ground as they can occupy or use in connection with the land," regardless of whether they "occupy it in a physical sense." The overflights in *Causby* occurred at 83 feet, but the upper limit of private airspace ownership may be much higher.[12] The Supreme Court's ambiguous dichotomization of airspace worked well enough for decades, but today's small, mass-market consumer drones that frequently—indeed almost exclusively—operate at altitudes below the *Causby* threshold prompt another look.

Preemption

Instead of letting state and local governments address state and local concerns through democratic processes, the FAA wants the authority to regulate drones, and it wants it now. Recent rulemakings and debates on Capitol Hill suggest that the agency desires blanket authority to preempt local drone action. In the name of consistency and conformity, the FAA likely would, if it could, deny communities the right to make even the most basic choices about drones, such as whether they should be flown in local parks after dark, instead of making those decisions itself.

Article VI, clause 2, of the United States Constitution provides that that document "and the Laws of the United States which shall be made in Pursuance thereof…shall be the supreme Law of the Land… any Thing in the Constitution or Laws of any State to the Contrary notwithstanding."[13] Federal law is thus our supreme law and "all conflicting state provisions" are to be held "without effect."[14] Because states are independent sovereigns, however, courts ordinarily presume that Congress did not intend to preempt state law, even interpreting ambiguous statutory pre-emption clauses to disfavor preemption,[15] unless Congress evinces a "clear and manifest" intent to supplant state law.[16] Congress has

1. Flying a drone weighing more than 0.55 pounds without first registering as a drone owner subjects the individual to civil penalties of up to $27,500 and criminal fines of $250,000 and up to 3 years' imprisonment. *See*, IB 1.
2. *State and Local Regulation of Unmanned Aircraft Systems (UAS) Fact Sheet*, Federal Aviation Administration Office of the Chief Counsel, Dec. 17, 2015, https://www.faa.gov/uas/regulations_policies/media/UAS_Fact_Sheet_Final.pdf.
3. Latin for "whoever's is the soil, it is theirs all the way to Heaven and all the way to hell."
4. *See* Bury v. Pope, 1 Cro. Eliz.118, 78 Eng. Rep. 375 (Q.B. 1587). On the rule's history, see, e.g., James D. Hill, *Liability for Aircraft Noise—the Aftermath of* Causby *and* Griggs, 19 U. Miami L. Rev. 1, n.3 (1964), and for more contemporary reconsideration, see, e.g., Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 Yale L.J. 357, 394–97 (2001).
5. Pub. L. No. 69-254.
6. Generally speaking, airspace below 500 feet is known as Class G airspace and is uncontrolled, though there are exceptions, such as the airspace around airports. The minimum threshold of safe flight is also higher than 500 feet above densely populated urban areas.
7. 328 U.S. 256 (1946).
8. *Id,* at 261.
9. *Id*, at 265.
10. *Id*, at 264 (emphasis added).
11. *Id*, at 265.
12. The *Causby* case dealt with World War II–era military overflights at an altitude of 83 feet above Causby's land. The Court's opinion thus affirms ownership of a column of airspace at least 83 feet high, but this is not the maximum theoretical extent of private airspace ownership.
13. U.S. Const. Art. VI, cl. 2.
14. Maryland v. Louisiana, 451 U.S. 725, 746 (1981). *See also* Hines v. Davidowitz, 312 U.S. 52, (1941); McCulloch v. Maryland, 4 Wheat. 316, 427 (1819) ("It is of the very essence of supremacy, to remove all obstacles to its action within its own sphere, and so to modify every power vested in subordinate governments.").
15. "[I]ndeed, even if its alternative were just as plausible as our reading of that text—we would nevertheless have a duty to accept the reading that disfavors pre-emption." Bates v. Dow Agrosciences LLC, 544 U.S. 431, 449 (2005). *See also* Medtronic, Inc. v. Lohr, 518 U.S. 470, 485 (1996).
16. *Id.* (citing New York State Conference of Blue Cross & Blue Shield Plans v. Travelers Ins. Co., 514 U.S. 645, 655 (1995) (quoting in turn Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947)). *See also* Lorillard Tobacco Co. v. Reilly, 533 U.S. 525, 540–41 (2001).

not done so here. To the contrary, in Section 336(a) of the FAA Modernization and Reform Act of 2012, Congress denied the FAA authority to regulate certain model aircraft used for recreational purposes.[17] Nevertheless, the FAA has, by regulation, made it a felony to fly a recreational drone without first registering as a drone owner with federal officials. By "clarifying" that the statutory term "aircraft" includes drones, a host of federal criminal offenses now apply to innocent child's play—despite the language in Section 336(a) of the 2012 FAA Modernization and Reform Act, suggesting that Congress never intended to authorize the FAA to make a child playing with a harmless Christmas toy into a federal felon.[18] Regardless, some legislators now seek to delegate their legislative powers to the Secretary of Transportation so that bureaucrats, not Congress or states or localities, wield the power to regulate drone operation.[19]

The Supreme Court has found statutes to evince preemptive intent through either "express language" or "structure and purpose."[20] Even an express preemption is not necessarily absolute; it invites analysis "of the substance and scope of Congress' displacement of state law" focused on a "fair but narrow reading" of the statute,[21] the precise problem at hand, and the nature of rights and duties affected.[22] If the scope, structure, and purpose of the statute are so broad sweeping that Congress appears to have "intended federal law to occupy the legislative field," preemption may also be inferred.[23] Courts may also determine state laws to be preempted "if there is an actual conflict between state and federal law"[24] that makes it "impossible for a private party to comply" with both.[25]

While federal agencies may issue preemptive regulations, if authorized to do so by statute, executive guidance provides that they "should not take actions limiting the policymaking discretion of states unless…a problem of national significance" requires "national activity."[26] President Obama noted in 2009 that "executive departments and agencies have sometimes announced that their regulations preempt State law, including State common law, without explicit preemption by the Congress or an otherwise sufficient basis under applicable legal principles."[27] The President decreed,

17. H.R. 658, 112th Cong. (2012). The FAA cannot "promulgate any rule or regulation regarding a model aircraft…if…the aircraft is flown strictly for hobby or recreational use," does not interfere with other aircraft, weighs less than 55 pounds, and operates "in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization." *Id. See also*, Jason Snead & John-Michael Seibler, *Purposeless Regulation: The FAA Drone Registry*, Heritage Foundation Issue Brief No. 4514 (Feb. 2, 2016).
18. The Supreme Court has long held that agencies have the authority to write regulations with criminal penalties and has only twice decided that an agency took a rulemaking too far. See, e.g., Mistretta v. United States, 488 U.S. 361, 372 (1989). Those two instances were Panama Refining Co. v. Ryan, 293 U.S. 388 (1935), and A.L.A. Schechter Poultry Corp. v. United States, 295 U.S. 495 (1935).
19. *See,* S.2658, The Federal Aviation Administration Reauthorization Act of 2016, http://www.commerce.senate.gov/public/_cache/files/591121a9-bd20-49a1-8722-595999f7b7e7/19DBD241DD51DB9950F7ABE0CF6DD729.faa-bill.pdf.
20. Altria Grp., Inc. v. Good, 555 U.S. 70, 76 (2008) (citing Jones v. Rath Packing Co., 430 U.S. 519, 525 (1977)) (holding state law banning certain tobacco ads not preempted by federal cigarette advertising law).
21. *Id.*
22. *Id.* at 76–85; Cipollone v. Liggett Grp., Inc., 505 U.S. 504, 524 (1992). The inquiry must "focus on the plain wording of the [express pre-emption] clause, which necessarily contains the best evidence of Congress' pre-emptive intent." *Altria Grp., Inc.*, 555 U.S. at 99 (Thomas, J. dissenting) (citing Sprietsma v. Mercury Marine, 537 U.S. 51, 62–63 (2002)).
23. *Id.* at 76.
24. *Id.* (citing Freightliner Corp. v. Myrick, 514 U.S. 280, 287 (1995)).
25. Sprietsma v. Mercury Marine, 537 U.S. 51, 64 (2002) (citing English v. General Elec. Co., 496 U.S. 72, 78–79 (1990)).
26. For the Executive branch's federalism-based guidance on administrative preemption, see Exec. Order No. 13132, 64 Fed. Reg. 43,255 (Aug. 4, 1999). "Despite the Order, some have asserted that executive agencies are not consistently following its directions." Report of the Am. Bar. Assoc. Task Force on Federal Agency Preemption, (Aug. 2010), *available at* http://www.tkklawfirm.com/pdf/american-bar-association-task-force-on-federal-agency-preemption-of-state-tort-laws-timothy-s-tomasik-task-force-member.pdf [hereafter ABA Report]. *See also* Viet D. Dinh, *Regulatory Preemption: Are Federal Agencies Usurping Congressional and State Authority?*, Hearing Before the S. Comm. on the Judiciary, 110th Cong., Sept. 12, 2007.
27. Office of the Press Sec., Presidential Memorandum Regarding Preemption, 74 Fed. Reg. 24,693 (2009) (May 20, 2009), *available at* https://www.whitehouse.gov/the-press-office/presidential-memorandum-regarding-preemption; 74 Fed. Reg. 24693 (2009).

> [T]he general policy of my Administration [is] that preemption of State law by executive departments and agencies should be undertaken only with full consideration of the legitimate prerogatives of the States and with a sufficient legal basis for preemption. Executive departments and agencies should be mindful that in our Federal system, the citizens of the several States have distinctive circumstances and values, and that in many instances it is appropriate for them to apply to themselves rules and principles that reflect these circumstances and values. As Justice Brandeis explained more than 70 years ago, "[i]t is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country."

The FAA should follow the President's guidance.

Drone Regulation: Largely a Local Matter

Unfortunately, Congress appears ready to expand, rather than roll back, the FAA power grab. On April 19, the United States Senate passed S. 2658, the Federal Aviation Administration Reauthorization Act of 2016,[28] which contains broad preemption language exceeding even the FAA's claimed authority.[29] As written, local and state governments would have no ability to regulate drone operation mere feet above their private property, airspace that has been traditionally controlled by state and local governments.[30] The FAA would be empowered to impose a "one size fits all" solution that would lead to situations most would characterize as bizarre. For example, states and localities can impose restrictions on the sale and use of kites, bullets, and fireworks—all items that at least briefly fly through the air. Total preemption would prohibit states and localities from enacting similar rules for drones. Similarly, states and localities may regulate traffic within their jurisdiction through speed limits, roadway direction, and zoning for activities like unloading cargo. Yet they could not similarly regulate drone activity.[31] Operating drones while intoxicated sounds dangerous;[32] but while localities can criminalize driving under the influence, only federal regulators would be able to enact a "drunk droning" law.

Now consider the perceived harms of drones—that they facilitate trespass, nuisance, or violate individual privacy rights. Such matters have historically been treated as state and local issues, too, because officials close to the community are best positioned to balance competing interests. The FAA has no special expertise in these matters, and its own Unmanned Aircraft Systems (UAS) fact sheet explicitly indicates that "[l]aws traditionally related to state and local police power—including land use, zoning, privacy, trespass, and law enforcement operations—generally are not subject to federal regulation."[33]

Seizing the Sky

The FAA may be preparing to revise that position. The agency maintains that drones, which can operate far lower than traditional aircraft, force a redefinition of the "navigable airspace" down to ground level.[34] As a result, the FAA contends its authority should extend to the ground and therefore absorb the the entire column of airspace above private property—including the space that the Supreme

28. S.2658, *supra* note 21.
29. While the FAA Fact Sheet indicates that a locality could, for example, "[specify] that UAS may not be used for voyeurism," section 2142 of the Senate bill would only allow for such statutes if they are not "specifically related to the use of an unmanned aircraft system." *Id* at 109.
30. S.2658, *supra* note 21. Section 2152(a) states: "No State or political subdivision of a State may enact or enforce any law, regulation, or other provision having the force and effect of law relating to the…registration, certification, operation, or maintenance of an unmanned aircraft system, including airspace, altitude, flight paths,…purpose of operations, and pilot, operator, and observer qualifications, training, and certification."
31. Though drone delivery services remain a flight of fancy, they are expected to supplement or even supplant certain traditional delivery services in the near future. Federal preemption would leave towns and communities with little authority to regulate this activity.
32. An intoxicated federal employee proved the point when he lost control of his drone above the White House and the quadcopter crashed on the mansion's grounds. *See*, Michael Shear and Michael Schmidt, *White House Drone Crash Described as a U.S. Worker's Drunken Lark*, N.Y. Times (Jan. 27, 2015), http://www.nytimes.com/2015/01/28/us/white-house-drone.html.
33. UAS Fact Sheet, *supra* note 2, at 3.
34. *See*, Jack Nicas, *Drones Boom Raises New Question: Who Owns Your Airspace?*, WSJ (May 13, 2015), http://www.wsj.com/articles/drones-boom-raises-new-question-who-owns-your-airspace-1431535417.

Court said was reserved to private owners in *Causby*—as part of the public domain. The move is reminiscent of action by another federal agency, the Environmental Protection Agency (EPA), and its Waters of the United States (WOTUS) rule.[35] With WOTUS, the EPA determined by regulatory fiat that it could expand its authority under the Clean Water Act to include dry land and ditches, a massive and literal regulatory land grab. An FAA redefinition of the "navigable airspace" would amount to a seizure of all private airspace, one-upping the EPA. If the FAA takes total authority over "navigable airspace," it would become the *sole* regulator of countless cubic miles of new airspace. Not even the EPA dared make such a claim under WOTUS.

Should such a development occur, private landowners could see their rights to the airspace over their property evaporate. Federal law clearly establishes a "public right of transit through the navigable airspace"—in other words, if the FAA determines that every cubic foot of air is "navigable airspace," then drone owners would have a legal right to fly their craft anywhere they wish, including at low altitudes above privately owned back yards and secluded spaces.[36] Private land owners would have no right to exclude drones from the airspace surrounding their property. In fact, since drones are considered to be aircraft no different than a 747, interfering with their operations—whether by shooting at them or simply swatting them from the sky—would be a federal criminal offense, a fact recently confirmed by the FAA.[37]

What is a property owner to do, then, if a drone zips by at eye level, violating one's privacy or interfering with the enjoyment of his land? S. 2658 enumerates specific causes of action that landowners might pursue to enforce their property rights, including claims of nuisance, voyeurism, personal injury, and property damage.[38] Curiously, however, the legislation makes no mention of one particularly crucial aspect of property law: trespass.[39] Whether this reflects an inadvertent oversight on the part of Congress or a deliberate determination that property owners ought to have no right to seek a remedy for aerial trespass is an open question. If the former, this illustrates the bill's shortcomings and risks of massive, centrally planned regulatory schemes designed to afford local control over only a few enumerated causes of action. With such restrictions in place, one may have to forego calling local police if a neighbor trespasses on his or her land, and hope that a distant federal bureaucrat might someday provide some remedy. If the latter, the absence of "trespass" may be more ominous: It would be inconsistent for the FAA to effectively wipe away claims of private ownership to airspace while acknowledging a private right of action against aerial trespass, which would be predicated on private ownership of the air. As under the EPA WOTUS rule's similar hyper-expansion of federal power, either a federal agency owns the rights on your land (or airspace), or you do. There may not be much wiggle room.

Whether deliberate or accidental, the lack of a cause of action for trespass leaves landowners at the mercy of federal regulators to enforce the sanctity of their private property—the same regulators who may not believe in private airspace rights at all.

Conclusion

Federal regulators and legislators may be rushing toward a world where the full field of drone law and policy is totally controlled by the federal government, but such an outcome would be far from optimal.

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35. *See* 80 C.F.R. 37054; *See also* Nat'l Assoc. of Counties, New "Waters of the United States" Definition Released (Oct. 2014).
36. 49 U.S.C. § 40103(a)(2).
37. 18 U.S.C. § 32 makes damaging, destroying, or disabling a civil aircraft a crime punishable by up to twenty years' imprisonment. The FAA recently confirmed that, in its view, this statute applies to drone take-downs. *See*, John Goglia, *FAA Confirms Shooting A Drone Is A Federal Crime. So When Will U.S. Prosecute?*, Forbes (Apr. 13, 2016), http://www.forbes.com/sites/johngoglia/2016/04/13/faa-confirms-shooting-drone-federal-crime-so-when-will-us-prosecute/#2f8cdc3853ef.
38. S.2658, *supra* note 21. Section 2152(b) preserves state and local enforcement authority for laws "relating to nuisance, voyeurism, privacy, data security, harassment, reckless endangerment, wrongful death, personal injury, property damage, or other illegal acts…if such laws are not specifically related to the use of an unmanned aircraft system."
39. *Id.*